CULINARY MEDICINE

Mechelle Acero Palma, MD, MMHA, DIBLM, FACLM
President, Philippine College of Lifestyle Medicine
Founder, Culinary Medicine Asia
Objectives

• Identify some diseases related to poor nutrition
• Discuss the identified modifiable risk factors for chronic conditions
• Analyze the role of health behavior change in improving health impact.
• Introduce Culinary medicine practice
Top 5 causes of death worldwide

LIFESTYLE RELATED

CARDIOVASCULAR DISEASE (17.3 MILLION*)
RESPIRATORY DISEASE (4.2 MILLION*)
CANCER (7.5 MILLION*)
DIABETES (1.2 MILLION*)
STROKE (6.1 MILLION*)

*Annual worldwide figures:
You may be susceptible to COVID-19 if you have a noncommunicable disease or pre-existing condition such as:

- High blood pressure
- Diabetes
- Heart disease
- Heart attack or stroke
- Chronic respiratory conditions
- Cancer

#coronavirus  #COVID19
Death rate of COVID-19 patients with preexisting conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>10.5%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>7.3%</td>
</tr>
<tr>
<td>Chronic respiratory disease</td>
<td>6.3%</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>6%</td>
</tr>
<tr>
<td>Cancer</td>
<td>5.6%</td>
</tr>
<tr>
<td>None</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Source: Chinese Center for Disease Control and Prevention
COVID-19 PANDEMIC amidst long standing Global NCD Epidemic
Figure 8. Ten Leading Causes of Death, Philippines: 2017
Death rate of COVID-19 patients with preexisting conditions

- Heart disease: 10.5%
- Diabetes: 7.3%
- Chronic respiratory disease: 6.3%
- High blood pressure: 6%
- Cancer: 5.6%
- None: 0.9%

Source: Chinese Center for Disease Control and Prevention
What if NCD cases were LOW?
PRIMARY SOLUTION TO THE DOUBLE BURDEN OF DISEASE
Stages of COVID-19 Infection

**Yellow**
- Stage 1: Asymptomatic
  - Limit Spread

**Orange**
- Stage 2: Flu Like Symptoms
  - Reduce Viral Load

**Red**
- Stage 3: SARS, ICU Ventilation
  - Overcome Lung Damage
You may be susceptible to **COVID-19** if you have a **noncommunicable disease** or pre-existing condition such as:

- High blood pressure
- Diabetes
- Heart disease
- Heart attack or stroke
- Chronic respiratory conditions
- Cancer

People with pre-existing non-communicable diseases (NCDs) appear to be more vulnerable to becoming severely ill with the virus. These NCDs include: cardiovascular disease (e.g. hypertension, persons who have had, or are at risk for, a heart attack or stroke); chronic respiratory disease (e.g. COPD); diabetes, cancer, or chronic kidney disease.

If you have a pre-existing condition:

- Continue taking your medication and follow medical advice
- Do not go out unless essential, e.g. for medical care
- Maintain a distance from others
- Wash your hands frequently with soap and water
- Avoid touching your eyes and nose
- **Maintain a healthy lifestyle by eating a healthy diet, staying active, quitting smoking, avoiding alcohol, getting enough sleep and safeguarding your mental health**
Modifiable Risk Factor

- A behavioral risk factor that **can** be reduced or controlled by intervention, thereby reducing the probability of disease.

- WHO has prioritized the following four:
  - Physical inactivity,
  - Tobacco use,
  - Alcohol use, and
  - **Unhealthy diets (increased fat and sodium, with low fruit and vegetable intake).**

http://www.who.int/nmh/events/2012/discussion_paper3.pdf
Prevention and control of noncommunicable diseases in the Philippines

The case for investment
THE PHILIPPINES
The case for investment in preventing and controlling NCDs

- 4.8% of GDP
- Current NCDs burden
- PHP 756.5 billion
  - US$ 14.5 billion
  - lost per year
- PHP 680.8 billion
  - indirect cost due to loss of workforce and reduced productivity
- 29% probability
  - of dying prematurely from one of the four main NCDs
<table>
<thead>
<tr>
<th>Package</th>
<th>Billion PHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco control package</td>
<td>10</td>
</tr>
<tr>
<td>Alcohol control package</td>
<td>8.4</td>
</tr>
<tr>
<td>Salt-reduction package</td>
<td>5.0</td>
</tr>
<tr>
<td>Physical activity awareness package</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Investment required for selected best buy intervention packages over 15 years**

- **PHP 28.9 billion**
### Return on Investment and Lives Saved

<table>
<thead>
<tr>
<th>Return on Investment</th>
<th>Lives Saved</th>
<th>Billions of PHP in Productivity Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8</td>
<td>71,000</td>
<td>97.8</td>
</tr>
<tr>
<td>7.0</td>
<td>58,000</td>
<td>67.0</td>
</tr>
<tr>
<td>29.9</td>
<td>164,000</td>
<td>163.1</td>
</tr>
<tr>
<td>12.7</td>
<td>58,000</td>
<td>49.8</td>
</tr>
</tbody>
</table>

**Total**

- **PHP 377.7 billion**
- **Return on investment over 15 years**
CLINICAL PRACTICE GUIDELINES

2020 International Society of Hypertension Global Hypertension Practice Guidelines


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SECTION 1: INTRODUCTION

Context and Purpose of This Guideline

Statement of Remit
To align with its mission to reduce the global burden of raised blood pressure (BP), the International Society of Hypertension (ISH) has developed worldwide practice guidelines for the treatment of hypertension in adults.
Treatment

Grade 1 Hypertension: 140–159/90–99 mmHg
1. Start lifestyle interventions
2. Start drug treatment:
   • Immediately: In high-risk patients (CVD, CKD, diabetes or organ damage)
   • After 3–6 months of lifestyle intervention: In low-risk patients with persistent BP elevation

Grade 2 Hypertension: ≥160/100 mmHg
1. Start drug treatment immediately
2. Start lifestyle intervention

Lifestyle Interventions
• Stop smoking
• Regular exercise
• Lose weight
• Salt reduction
• Healthy diet and drinks
• Lower alcohol intake
• Lower stress
• Reduce exposure to air pollution

Drug Therapy Steps
Simplify regimen with once daily dosing and single pill combinations. Consider monotherapy in low-risk grade 1 hypertension and in patients aged ≥80 years or frail

Non-Black Patients
1. Low dose ACEI/ARB* + DHP-CCB
2. Increase to full dose
3. Add thiazide-like diuretic
4. Add spironolactone or, if not tolerated or contraindicated, amiloride, doxazosin, eplerenone, clonidine or beta-blocker

Black Patients
1. Low dose ARB* + DHP-CCB or DHP-CCB + thiazide-like diuretic
2. Increase to full dose
3. Add diuretic or ACEI/ARB
4. Add spironolactone or, if not tolerated or contraindicated, amiloride, doxazosin, eplerenone, clonidine or beta-blocker

* No ACEI/ARB in women with or planning pregnancy
LIFESTYLE THERAPY
RISK STRATIFICATION FOR DIABETES COMPLICATIONS

INTENSITY STRATIFIED BY BURDEN OF OBESITY AND RELATED COMPLICATIONS

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>Physical Activity</th>
<th>Sleep</th>
<th>Behavioral Support</th>
<th>Smoking Cessation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain optimal weight</td>
<td>150 min/week moderate exertion (e.g., walking, stair climbing)</td>
<td>About 7 hours per night</td>
<td>Community engagement</td>
<td>No tobacco products</td>
</tr>
<tr>
<td>Calorie restriction (if BMI is increased)</td>
<td>Strength training</td>
<td>Basic sleep hygiene</td>
<td>Alcohol moderation</td>
<td>Nicotine replacement therapy</td>
</tr>
<tr>
<td>Plant-based diet; high polyunsaturated and monounsaturated fatty acids</td>
<td>Increase as tolerated</td>
<td>Screen OSA</td>
<td>Discuss mood with HCP</td>
<td>Referral to structured program</td>
</tr>
<tr>
<td>Avoid trans fatty acids; limit saturated fatty acids</td>
<td>Structured program; Wearable technologies</td>
<td>Home sleep study</td>
<td>Formal behavioral therapy</td>
<td></td>
</tr>
<tr>
<td>Structured counseling; Meal replacement</td>
<td>Medical evaluation/ clearance</td>
<td>Referral to sleep lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Underlying Risk Factors and Metabolic Syndrome

The predominant underlying risk factors for the syndrome appear to be abdominal obesity\textsuperscript{2–4} and insulin resistance\textsuperscript{5,6}; other associated conditions can be physical inactivity,\textsuperscript{3,7} aging,\textsuperscript{8} and hormonal imbalance.\textsuperscript{9} An atherogenic diet (e.g., a diet rich in saturated fat and cholesterol) can enhance risk for developing cardiovascular disease in people with the syndrome, although this diet is not listed specifically as an underlying risk factor for the condition.\textsuperscript{1} One theory holds that insulin resistance is the essential cause of the metabolic syndrome.\textsuperscript{10} There is no doubt that insulin resistance predisposes to the hyperglycemia of type 2 diabetes mellitus. Multiple metabolic pathways have also been proposed to link insulin resistance and compensatory hyperinsulinemia to the other metabolic risk factors.\textsuperscript{10,11} It is recognized that some
# TABLE 3. Therapeutic Goals and Recommendations for Clinical Management of Metabolic Syndrome

<table>
<thead>
<tr>
<th>Therapeutic Target and Goals of Therapy</th>
<th>Therapeutic Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifestyle risk factors</strong></td>
<td>Long-term prevention of CVD and prevention (or treatment) of type 2 diabetes mellitus</td>
</tr>
<tr>
<td>Abdominal obesity</td>
<td>Consistently encourage weight maintenance/reduction through appropriate balance of physical activity, caloric intake, and formal behavior-modification programs when indicated to maintain/achieve waist circumference of &lt;40 inches in men and &lt;35 inches in women. Aim initially at slow reduction of ~7% to 10% from baseline weight. Even small amounts of weight loss are associated with significant health benefits.</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>In patients with established CVD, assess risk with detailed physical activity history and/or an exercise test, to guide prescription. Encourage 30 to 60 min of moderate-intensity aerobic activity: brisk walking, preferably daily, supplemented by increase in daily lifestyle activities (eg, pedometer step tracking, walking breaks at work, gardening, housework). Longer exercise times can be achieved by accumulating exercise throughout day. Encourage resistance training 2 d/wk. Advise medically supervised programs for high-risk patients (eg, recent acute coronary syndrome or revascularization, CHF).</td>
</tr>
<tr>
<td>Atherogenic diet</td>
<td>Recommendations: saturated fat &lt;7% of total calories; reduce trans fat; dietary cholesterol &lt;200 mg/dL; total fat 25% to 35% of total calories. Most dietary fat should be unsaturated; simple sugars should be limited.</td>
</tr>
<tr>
<td><strong>Metabolic risk factors</strong></td>
<td>Shorter-term prevention of CVD or treatment of type 2 diabetes mellitus</td>
</tr>
<tr>
<td>Atherogenic dyslipidemia</td>
<td>Elevated LDL-C (see Table 4 for details)</td>
</tr>
<tr>
<td>Primary target: elevated LDL-C (see Table 4 for details)</td>
<td>Elevated LDL-C (see Table 4 for details)</td>
</tr>
<tr>
<td>Secondary target: elevated non-HDL-C</td>
<td>Elevated non-HDL-C</td>
</tr>
<tr>
<td>High-risk patients*: &lt;130 mg/dL (3.4 mmol/L) (optional: &lt;100 mg/dL) (2.6 mmol/L) for very high-risk patients†</td>
<td>Follow strategy outlined in Table 4 to achieve goal for LDL-C</td>
</tr>
<tr>
<td>Second option to achieve non-HDL-C goal: Add fibrate (preferably fenofibrate) or nicotinic acid if non-HDL-C remains relatively high after LDL-lowering drug therapy</td>
<td></td>
</tr>
<tr>
<td>Therapeutic option: &lt;130 mg/dL (3.4 mmol/L)</td>
<td>Give preference to adding fibrate or nicotinic acid in high-risk patients</td>
</tr>
<tr>
<td>Moderately high-risk patients‡: &lt;160 mg/dL (4.1 mmol/L)</td>
<td>Give preference to avoiding addition of fibrate or nicotinic acid in moderately high-risk or moderate-risk patients</td>
</tr>
<tr>
<td>All patients: If TG is ≥500 mg/dL, initiate fibrate or nicotinic acid (before LDL-lowering therapy; treat non-HDL-C to goal after TG-lowering therapy)</td>
<td></td>
</tr>
<tr>
<td>Goals of Therapy</td>
<td>Therapeutic Recommendations</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| High-risk patients*: <100 mg/dL (2.6 mmol/L) **for very high-risk patients‡ in this category, optional goal <70 mg/dL** | High-risk patients: lifestyle therapies† plus LDL-C-lowering drug to achieve recommended goal  
If baseline LDL-C ≥100 mg/dL, initiate LDL-lowering drug therapy  
If on-treatment LDL-C ≥100 mg/dL, intensify LDL-lowering drug therapy (may require LDL-lowering drug combination)  
If baseline LDL-C <100 mg/dL, initiate LDL-lowering therapy based on clinical judgment (ie, assessment that patient is at very high risk) |
| Moderately high-risk patients§: <130 mg/dL (3.4 mmol/L) **for higher-risk patients|| in this category, optional goal is <100 mg/dL (2.6 mmol/L)** | Moderately high-risk patients: lifestyle therapies + LDL-lowering drug if necessary to achieve recommended goal when LDL-C ≥130 mg/dL (3.4 mmol/L) after lifestyle therapies  
If baseline LDL-C is 100 to 129 mg/dL, LDL-lowering therapy can be introduced if patient’s risk is assessed to be in upper ranges of this risk category |
| Moderate-risk patients¶: <130 mg/dL (3.4 mmol/L) | Moderate risk patients: lifestyle therapies + LDL-C lowering drug if necessary to achieve recommended goal when LDL-C ≥160 mg/dL (4.9 mmol/L) after lifestyle therapies |
| Lower-risk patients#: <160 mg/dL (4.9 mmol/L) | Lower-risk patients: lifestyle therapies + LDL-C lowering drug if necessary to achieve recommended goal when LDL-C ≥190 mg/dL after lifestyle therapies (for LDL-C 160 to 189 mg/dL, LDL-lowering drug is optional) |

*High-risk patients are those with established ASCVD, diabetes, or 10-year risk for coronary heart disease >20%. For cerebrovascular disease, high-risk condition includes transient ischemic attack or stroke of carotid origin or >50% carotid stenosis.
†Lifestyle therapies include weight reduction, increased physical activity, and antitherogenic diet (see Table 3 for details).
‡Very high-risk patients are those who are likely to have major CVD events in next few years, and diagnosis depends on clinical assessment. Factors that may confer very high risk include recent acute coronary syndromes, and established coronary heart disease + any of following: multiple major risk factors (especially diabetes), severe and poorly controlled risk factors (especially continued cigarette smoking), and multiple risk factors of metabolic syndrome.
§Moderately high-risk patients are those with 10-year risk for coronary heart disease 10% to 20%.
¶Factors that can raise individuals to upper range of moderately high risk are multiple major risk factors, severe and poorly controlled risk factors (especially
Plants-Based Diets Are Associated With a Lower Risk of Incident Cardiovascular Disease, Cardiovascular Disease Mortality, and All-Cause Mortality in a General Population of Middle-Aged Adults

Hyunjoo Kim, PhD; Laura E. Caulfield, PhD; Vanessa Garcia-Larsen, PhD; Lyn M. Steffen, PhD; Josef Coresh, MD, PhD; Casey M. Rebholz, PhD

Background—Previous studies have documented the cardiometabolic health benefits of plant-based diets; however, these studies were conducted in selected study populations that had narrow generalizability.

Methods and Results—We used data from a community-based cohort of middle-aged adults (n=12,168) in the ARIC (Atherosclerosis Risk in Communities) study who were followed up from 1987 through 2016. Participants’ diet was classified using 4 diet indexes. In the overall plant-based diet index and provegetarian diet index, higher intakes of all or selected plant foods received higher scores; in the healthy plant-based diet index, higher intakes of only the healthy plant foods received higher scores; in the less healthy plant-based diet index, higher intakes of only the less healthy plant foods received higher scores. In all indexes, higher intakes of animal foods received lower scores. Results from Cox proportional hazards models showed that participants in the highest versus lowest quintile for adherence to overall plant-based diet index or provegetarian diet had a 16%, 31% to 32%, and 18% to 25% lower risk of cardiovascular disease, cardiovascular disease mortality, and all-cause mortality, respectively, after adjusting for important confounders (all P<0.05 for trend). Higher adherence to a healthy plant-based diet index was associated with a 19% and 11% lower risk of cardiovascular disease mortality and all-cause mortality, respectively, but not incident cardiovascular disease (P<0.05 for trend). No associations were observed between the less healthy plant-based diet index and the outcomes.

Conclusions—Diets higher in plant foods and lower in animal foods were associated with a lower risk of cardiovascular morbidity and mortality in a general population. (J Am Heart Assoc. 2019;8:e012865. DOI: 10.1161/JAHA.119.012865.)
2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease
A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Practice Guidelines

TOP 10 TAKE-HOME MESSAGES FOR THE PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE

1. The most important way to prevent atherosclerotic vascular disease, heart failure, and atrial fibrillation is to promote a healthy lifestyle throughout life.

2. A team-based care approach is an effective strategy for the prevention of cardiovascular disease. Clinicians should evaluate the social determinants of health that affect individuals to inform treatment decisions.
Lifestyle Medicine focuses on 6 areas to improve health:

- Manage Stress
- Improve your sleep
- Form & maintain relationships
- Healthy eating of plant-based food
- Avoid risky substances
- Increase physical activity
LM Intervention Modalities

- Nutrition
- Physical Activity
- Stress Management/Emotional wellness
- Sleep
- Smoking Cessation
- Avoiding risky substance use
- Non-drug Modalities

Emphasis on behavioral interventions and social/relationships, including happiness
Ignorance of Nutrition is no longer Defensible

Dr. Neal Barnard, PCRM founding President

FOOD IS MEDICINE
Choose predominantly whole, plant-based foods that are rich in fiber and nutrient dense. Vegetables, fruits, legumes, whole grains, nuts and seeds occupy the center of your plate, in each meal.
Unhealthy Diet is a **MODIFIABLE** risk factor for Noncommunicable Disease
Unhealthy Diet Contributes to risk for Communicable Disease Fatality
REPURPOSING FOOD

Modify the risk

- Noncommunicable Disease
- Communicable Disease
Leafy Green Vegetables

Sig: 1-2 cups in each meal for 30 days
What Is Culinary Medicine and What Does It Do?

John La Puma, MD, FACP

Introduction

Over the past 35 years, a new enthusiasm has emerged about the relationship of food, eating, and cooking to personal health and wellness. Though there are few peer-reviewed publications, grant monies, books, or biomedical journals entitled “culinary medicine,” there are thousands of peer-reviewed publications, found mainly in mainstream medical journals that form its published research base. How can the emerging field of culinary medicine be helpfully described?

Culinary Medicine

Definitions and goals
CULINARY MEDICINE

Helping patients achieve and maintain optimal health through a combination of nutrition and culinary knowledge.
Nutrition from the kitchen: culinary medicine impacts students’ counseling confidence

Emily Magallanes¹, Ahana Sen², Milette Siler³ and Jaclyn Albin⁴*

Abstract

Background: Although a poor diet is the number one risk factor for early death in the United States and globally, physicians receive little to no training in dietary interventions and lack confidence counseling patients about lifestyle modifications. Innovative, interprofessional strategies to address these gaps include the emergence of culinary medicine, a hands-on approach to teaching the role of food in health outcomes. We sought to assess the impact of a culinary medicine elective on counseling confidence, awareness of an evidence-based approach to nutrition, and understanding of the role of interprofessional teamwork in dietary lifestyle change among medical students at one undergraduate medical school.

Methods: We administered pre- and post-course surveys and conducted focus groups at the end of the elective (n=34)
Culinary Medicine: Advancing a Framework for Healthier Eating to Improve Chronic Disease Management and Prevention

Irl B. Hirsch, MD\textsuperscript{1}; Alison Evert, MS, RD, CDE\textsuperscript{2}; Alexander Fleming, MD\textsuperscript{3}; Linda M. Gaudiani, MD, FACP, FACE\textsuperscript{4}; Karl J. Guggenmos, MBA, AAC\textsuperscript{5}; Daniel I. Kaufer, MD\textsuperscript{6}; Janet B. McGill, MD, MA, FACE\textsuperscript{7}; Carol A. Verderese, BA\textsuperscript{8}; and Joe Martinez, RPh, PDE, CMS\textsuperscript{9}

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Culinary medicine is a new evidence-based field in medicine that blends the art of food and cooking with the science of medicine. Intended to be of constructive use to clinicians, patients, and families, this column covers 10 practical ways for eaters to enjoy preparing and choosing foods, meals, and beverages that work to prevent and treat disease and to enhance one’s own natural ability to stay and get well. The column also identifies mechanisms by which food and beverages work in the body as culinary medicine. The column identifies what-to-look-for “chef’s secrets” for choosing fruits and vegetables at the peak of flavor in your own garden, in supermarkets, and in farmer’s markets. Edible flowers, herbs, and spices with special culinary medical value are also described, as are essential ways to choose and also, when necessary, avoid them. Finally, the corporate and professional office is described as an ideal site for nature-
Culinary medicine, an emerging evidence-based discipline in medicine, nutrition, and public health, combines the traditional art and skills of food preparation with the sciences of medicine and nutrition to maintain health and manage disease states.
newborns. The systematization of reported studies has made it reasonable to conclude that foods are able to modulate immune functions manifesting as either innate immunity (phagocytic activity, NK cell activity) or acquired immunity (T cell response, antibody production). Moreover, improvement of immune functions by foods can normalize the physical state of allergic patients or cancer patients, and may reduce the risk of diseases in healthy individuals. Therefore, it is valuable to assess the immune-modulating abilities of foods by measuring at least one parameter of either innate or acquired immunity.
Effectiveness of plant-based diets in promoting well-being in the management of type 2 diabetes: a systematic review

Anastasios Toumpanakis,¹ Triece Turnbull,² Isaura Alba-Barba³

ABSTRACT
Diet interventions have suggested an association between plant-based diets and improvements in psychological well-being, quality of life and glycated hemoglobin (HbA1c) control in populations with diabetes. The aims of this review are to systematically analyze the available literature on plant-based diet interventions targeting diabetes in adults and to clearly define the benefits on well-being of such interventions. This is a systematic review of controlled trials. A computerized search of multiple databases was conducted using pre-defined search terms. The search revealed 250 relevant studies of which 21 were included in the final review. The results suggest that plant-based diet interventions may improve well-being in populations with diabetes. The evidence suggests that plant-based diets may help improve quality of life, reduce psychological symptoms and improve glycemic control. The economic impact of plant-based diets may also be favorable, with estimated direct and indirect costs of $176 billion and $69 billion, respectively. Diabetes UK states that 90% of people with diabetes have type 2 diabetes (T2D), while at the same time the percentage of people with T2D is on the rise and increasing. The increasing levels of obesity in many countries nowadays have underlined a very concerning, newly introduced aspect: the prevalence of T2D in children and teenagers. This
CULINARY MEDICINE

PRACTICE OF HELPING PATIENTS USE NUTRITION AND GOOD COOKING HABITS TO RESTORE AND MAINTAIN HEALTH
WHAT TO EAT
THE EMERGING FIELD OF CULINARY MEDICINE

THE GEORGE WASHINGTON UNIVERSITY
GW CULINARY MEDICINE
SCHOOL OF MEDICINE & HEALTH SCIENCES

CENTRE FOR CULINARY MEDICINE UK
Westminster Kingsway College
Wednesday 26th February 2020
www.culinarymedicineuk.org
Elective class
- Medicine
- nutrition & dietetics
PREVENT, ARREST & REVERSE
Lifestyle Related Diseases

Culinary Medicine
On your Plate, every Meal

MECHELLE ACERO PALMA, MD
Culinary Medicine Specialist
NUTRITION COACHING

Identifying the cause of disease from food sources and identifying the remedy using food as well. Utilizing stage-based behavioral interventions to improve food preferences for targeted health outcome.
WHOLE PLANT BASED FOODS HAVE BEEN LINKED WITH:

- Prevention and reversal of type 2 diabetes
- Treatment of acid reflux
- Helping constipation, hemorrhoids and diverticulosis
- Helping lessen asthma
- Helping with kidney disease
Diet Comparison (per day)

**Modern / Optimal**

- **Fats and Oils**: 120 to 80 grams
  - Less than 40 grams
- **Sugar**: 30 to 40 teaspoons
  - Less than 10 teaspoons
- **Cholesterol**: 400 milligrams
  - Less than 50 milligrams
- **Sodium**: 4000 milligrams
  - Less than 1500 milligrams
- **Fiber**: 12 grams
  - More than 40 grams
- **Water**: Minimal
  - 8 glasses

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THE AMERICAN COLLEGE OF LIFESTYLE MEDICINE DIETARY POSITION STATEMENT

ACLM recommends an eating plan based predominantly on a variety of minimally processed vegetables, fruits, whole grains, legumes, nuts and seeds.

WHAT AMERICA EATS

- Increased risk for Obesity, T2 Diabetes, Heart Disease, and some Cancers
- Poor nutrition is the leading cause of death globally.

WHOLE FOOD PLANT-BASED EATING PLAN

- Increase whole plant foods, fruits, vegetables, whole grains, beans, legumes, nuts, seeds, water
- Decrease sweets and snacks, fast food, fried foods, refined grains, refined sugar, meat, dairy, eggs, poultry, high sodium foods

- Decreased risk for Obesity, T2 Diabetes, Heart Disease, and some Cancers
- Chronic disease treatment and potential reversal

TIPS FOR IMPROVED NUTRITION AND HEALTH

- Any movement toward WFPB eating is positive
- More movement toward a WFPB eating plan increases impact
- Tailored and sustainable approaches are recommended
Physicians’ Dietary Knowledge, Attitudes, and Counseling Practices: The Experience of a Single Health Care Center at Changing the Landscape for Dietary Education

Abstract: Morbidity and mortality associated with cardiovascular disease can be significantly modified through lifestyle choices. Continuing medical education (CME) conference was developed to improve knowledge and lifestyle counseling through improved nutrition knowledge.
Free Course
Open for anyone who need to start eating right

Basic Certification Course
For patients, family members and care givers

Professional Course
For physicians and allied health professionals
LOCKDOWN’S EFFECT ON HEALTH
(Exercise and Nutrition)

MECHELLE ACERO PALMA, MD, MMHA, DIBLM, FACLM
DELICIOUS
PLANT-BASED RECIPES FOR Culinary Medicine Workshop

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The Doctor’s Kitchen PH Consultant
Plant–based Nutrition Consultant

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PLANT-BASED RECIPES FOR
Culinary Medicine Workshop

Four-Course Menu

**SALAD**
- Garden Fresh Salad
- Cado Cado Sauce
- Classic Vegan Caesar Dressing
- Creamy Mayonnaise

**SOUP**
- Potato Leek Soup

**MAIN DISH**
- ToFish Fingers
- Garlic Dip

**DESSERT**
- Granola Tiramisu

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Thank you